

Title (en)

ARRAY AND METHOD FOR MONITORING THE PERFORMANCE OF DWDM MULTIWAVELENGHT SYSTEMS

Title (de)

ANORDNUNG UND VERFAHREN ZUR ÜBERWACHUNG DER PERFORMANCE VON DWDM MEHRWELLENLÄNGENSYSTEMEN

Title (fr)

DISPOSITIF ET PROCEDE POUR SURVEILLER LE COMPORTEMENT DE SYSTEMES A LONGUEURS D'ONDE MULTIPLES DWDM

Publication

**EP 1135707 B1 20030820 (DE)**

Application

**EP 99950610 A 19991004**

Priority

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- EP 9907340 W 19991004

Abstract (en)

[origin: US2006027737A1] A system and method for monitoring all the characteristic parameters of a DWDM communication system is implemented with two variants. Firstly, this is achieved by means of a specific grating spectrometer displaying a high 5 resolution and a high-speed sampling of the measured values, and secondly by the application of an opto-electronic cross correlator as a purely electronic solution. The grating spectrometer is expediently a particular system in a mixed array according to Ebert and Fastie, wherein the light to be measured passes four times through the grating in a specific manner. The opto-10 electronic cross correlator can mix the working light with a reference light tunable in terms of its frequency to form an electrical low-frequency signal that is analyzed in a high-impedance operation.

IPC 1-7

**G02B 6/293; G01J 3/18; H04B 10/08; H04B 10/145**

IPC 8 full level

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**H04B 10/145** (2006.01); **H04J 14/02** (2006.01)

CPC (source: EP US)

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**G02B 6/29314** (2013.01 - EP US); **G02B 6/29361** (2013.01 - EP US); **G02B 6/29385** (2013.01 - EP US)

Citation (examination)

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**US 2006027737 A1 20060209**; AT E247838 T1 20030915; DE 19845701 A1 20000406; DE 59906706 D1 20030925; EP 1135707 A2 20010926;  
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